



Attorney Docket No. IMMR-106/01US

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of Louis B. ROSENBERG *et al.*

Serial No.: 10/615,927

Examiner: Unassigned

Filed: July 10, 2003

Art Unit: 2675

Confirmation No. 9912

For: **NETWORKED APPLICATIONS INCLUDING HAPTIC FEEDBACK**

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**INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. §1.97(b)**

In accordance with the duty of disclosure set forth in 37 C.F.R. §1.56,
Applicant(s) hereby submits the following information in conformance with 37 C.F.R.
§§1.97 and 1.98.

- ☒ Pursuant to 37 C.F.R. §1.98, a copy of each document cited in the attached Form PTO/SB/08A (1 of 2) is provided on the enclosed CD.
- ☒ No copies of the publications listed on the attached Form PTO/SB/08A (2 of 2) are being provided pursuant to 37 C.F.R. §1.98(d) because the publications were previously cited by or submitted to the Office in prior Application Serial Nos. 09/153,781, filed September 16, 1998, 08/571,606 (now U.S. Patent No. 6,219,032 B1), 09/050,665 (now U.S. Patent No. 6,219,033 B1), 08/664,086 (now U.S. Patent No. 6,028,593), 08/691,852 (now U.S. Patent No. 5,956,484) and/or 08/566,282 (now U.S. Patent No. 5,734,373) to which the above-identified application claims priority under 35 U.S.C. §120.
- ☐ No copies of any U.S. patents or U.S. patent application publications listed on the attached Form PTO/SB/08A are being provided pursuant to 37 C.F.R. §1.98 because this application was filed after June 30, 2003.
- ☐ Publication(s) ___ listed on the attached Form PTO/SB/08A were cited in a foreign search or examination report corresponding to ___ application serial no. ___ and mailed on ___.
- ☐ Enclosed is a copy of a non-English publication(s) ___. Pursuant to §609 of the M.P.E.P., Applicant submits the attached foreign search or examination report, which cites such non-English language publication(s).

- ☐ Enclosed is a copy of a non-English publication(s) _____. English language publication ____ (copy enclosed) claims priority from this non-English publication.
- ☐ Enclosed is an explanation of non-English publication(s) ____ for which an English translation is not available.
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- ☐ Enclosed is a copy of pending patent Application Serial No. _____.

This Information Disclosure Statement is filed within any one of the following time periods:

- ☐ within three months from the filing date of this national application other than a CPA under 37 C.F.R. § 1.53(d);
- ☐ within three months from the date of entry of the national stage as set forth in 37 C.F.R. §1.491 in this international application;
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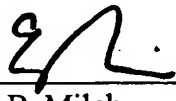
It is respectfully requested that the Examiner consider the above-noted information and return an initialed copy of the attached Form PTO/SB/08A to the undersigned.

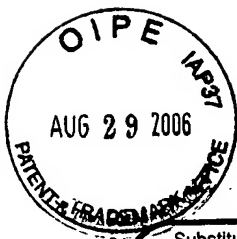
Dated: October 18, 2004

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(1 of 2)

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet **1** of **6****Complete If Known**

Application Number	10/615,927
Filing Date	July 10, 2003
First Named Inventor	Louis B. Rosenberg
Art Unit	2675
Examiner Name	Unassigned
Attorney Docket Number	IMMR106/01US

U.S. PATENT DOCUMENTS

Examiner	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
		6,422,941	7/23/2002	Thomer et al.	
		6,349,301	2/19/2002	Mitchell et al.	
		6,160,489	12/12/2000	Perry et al.	
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		4,885,565	12/5/1989	Embach	
		4,794,392	12/27/1988	Selinko	
		4,713,007	12/15/1987	Alban	

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¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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		4,708,656	11/24/1987	De Vries et al.	
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		4,127,752	11/28/1978	Lowthorp	
		3,911,416	10/7/1995	Feder	
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		3,902,687	6/25/1973	Hightower	
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		3,517,446	6/30/1970	Corlyon et al.	
		3,497,668	2/24/1970	Hirsch	
		3,220,121	11/30/1965	Cutler	
		3,157,853	11/17/1964	Hirsch	
		2,972,140	2/14/1961	Hirsch	

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			
		EP	0349086		1/3/1990	Stork Kwant B.V.	
		JP	H2-185278		7/19/1990	Taito Corporation	
		JP	H4-8381		1/13/1992	Epoch Co. and Key- Planning Co.	
		JP	H7-24147		1/27/1995	Sega Corporation	
		JP	H5-192449		8/3/1993	Taito Corporation	

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First Named Inventor	Louis B. Rosenberg
Art Unit	2675
Examiner Name	Unassigned
Attorney Docket Number	IMMR106/01US

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
		BAIGRIE, "Electric Control Loading - A Low Cost, High Performance Alternative," <i>Proceedings of Interservice/Industry Training Systems Conference</i> , pp. 247-254, November 6-8, 1990.
		IWATA, "Pen-based Haptic Virtual Environment," 0-7803-1363-1/93 IEEE, pp 287-292, 1993.
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		JONES et al., "A perceptual analysis of stiffness," ISSN 0014-4819 Springer International (Springer-Verlag); <i>Experimental Brain Research</i> , Vol. 79, No. 1, pp. 150-156, 1990.
		BURDEA et al., "Distributed Virtual Force Feedback, Lecture Notes for Workshop on Force Display in Virtual Environments and Its Application to Robotic Teleoperation," 1993 IEEE International Conference on Robotics and Automation, pp. 25-44, 05/02/1993.
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		STANLEY et al., "Computer Simulation of Interacting Dynamic Mechanical Systems Using Distributed Memory Parallel Processors," DSC-Vol. 42, <i>Advances in Robotics</i> , pp. 55-61, ASME 1992.
		RUSO, "Controlling Dissipative Magnetic Particle Brakes in Force Reflective Devices," DSC-Vol. 42, <i>Advances in Robotics</i> , pp. 63-70, ASME 1992.

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Sheet **4** of **6****Complete if Known**

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Examiner Name	Unassigned
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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
		KONTARINIS et al., "Display of High-Frequency Tactile Information to Teleoperators," <i>Telemanipulator Technology and Space Telerobotics</i> , Won S. Kim, Editor, Proc. SPIE Vol. 2057, pp. 40-50, Sep. 7-9, 1993.
		PATRICK et al., "Design and Testing of A Non-reactive, Fingertip, Tactile Display for Interaction with Remote Environments," <i>Cooperative Intelligent Robotics In Space</i> , Rui J. deFigueiredo et al., Editor, Proc. SPIE Vol. 1387, pp. 215-222, 1990.
		ADELSTEIN, "A Virtual Environment System For The Study of Human Arm Tremor," <i>Ph.D. Dissertation</i> , Dept. of Mechanical Engineering, MIT, June 1989, archived 3/13/90.
		BEJCZY, "Sensors, Controls, and Man-Machine Interface for Advanced Teleoperation," <i>Science</i> , Vol. 208, No. 4450, pp. 1327-1335, 1980.
		BEJCZY et al., "Generalization of Bilateral Force-Reflecting Control of Manipulators," <i>Proceedings Of Fourth CISM-IFTOMM</i> , Sep. 8-12, 1981.
		MCAFFEE, "Teleoperator Subsystem/Telerobot Demonstrator: Force Reflecting Hand Controller Equipment Manual," <i>JPL D-5172</i> , January 1988.
		MINSKY, "Computational Haptics: The Sandpaper System for Synthesizing Texture for a Force-Feedback Display," <i>Ph.D. Dissertation</i> , MIT, June 1995, archived 7/6/95.
		JACOBSEN et al., "High Performance, Dextrous Telerobotic Manipulator With Force Reflection," <i>Intervention/ROV '91 Conference & Exposition</i> , Hollywood, Florida, May 21-23, 1991.
		SHIMOGA, "Finger Force and Touch Feedback Issues in Dexterous Telemanipulation," <i>Proceedings of Fourth Annual Conference on Intelligent Robotic Systems for Space Exploration</i> , Rensselaer Polytechnic Institute, Sep. 30 - Oct. 1, 1992.
		IBM Technical Disclosure Bulletin, "Mouse Ball-Actuating Device With Force and Tactile Feedback," Vol. 32, No. 9B, February 1990.
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		EBERHARDT et al., "OMAR - A Haptic display for speech perception by deaf and deaf-blind individuals," <i>IEEE Virtual Reality Annual International Symposium</i> , Seattle, WA, Sep. 18-22, 1993.
		RABINOWITZ et al., "Multidimensional tactile displays: Identification of vibratory intensity, frequency, and contactor area," <i>Journal of The Acoustical Society of America</i> , Vol. 82, No. 4, October 1987.

Examiner
SignatureDate
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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
		BEJCZY et al., "Kinesthetic Coupling Between Operator and Remote Manipulator," <i>International Computer Technology Conference, The American Society of Mechanical Engineers</i> , San Francisco, CA, August 12-15, 1980.	
		BEJCZY et al., "A Laboratory Breadboard System For Dual-Arm Teleoperation," <i>SOAR '89 Workshop</i> , JSC, Houston, TX, July 25-27, 1989.	
		OUH-YOUNG, "A Low-Cost Force Feedback Joystick and Its Use in PC Video Games," <i>IEEE Transactions on Consumer Electronics</i> , Vol. 41, No. 3, August 1995.	
		MARCUS, "Touch Feedback in Surgery," <i>Proceedings of Virtual Reality and Medicine The Cutting Edge</i> , Sept. 8-11, 1994.	
		BEJCZY, et al., "Universal Computer Control System (UCCS) For Space Telerobots," CH2413-3/87/0000/0318501.00 1987 IEEE, 1987.	
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		KONTARINIS et al., "Tactile Display of Vibratory Information in Teleoperation and Virtual Environments," <i>PRESENCE</i> , 4(4):387-402, Harvard Univ., 1995.	
		AUKSTAKALNIS et al., "Silicon Mirage: The Art and Science of Virtual Reality," ISBN 0-938151-82-7, pp. 129-180, 1992.	
		EBERHARDT et al., "Inducing Dynamic Haptic Perception by The Hand: System Description and Some Results," <i>DSC-Vol. 55-1, Dynamic Systems and Control: Volume 1</i> , ASME 1994.	
		GOBEL et al., "Tactile Feedback Applied to Computer Mice," <i>International Journal of Human-Computer Interaction</i> , Vol. 7, No. 1, pp. 1-24, 1995.	
		PIMENTEL et al., "Virtual Reality: through the new looking glass," 2 nd Edition; McGraw-Hill, ISBN 0-07-050167-X, pp. 41-202, 1994.	
Examiner Signature		Date Considered	

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
		"Cyberman Technical Specification," <i>Logitech Cyberman SWIFT Supplement to Logitech Mouse Technical Reference and Programming Guide</i> , 4/5/1994.
		OUHYOUNG et al., "The Development of A Low-Cost Force Feedback Joystick and Its Use in the Virtual Reality Environment," <i>Proceedings of the Third Pacific Conference on Computer Graphics and Applications, Pacific Graphics '95</i> , Seoul, Korea, 21-24 August 1995.
		KACZMAREK et al., "Tactile Displays," <i>Virtual Environment Technologies</i> , Chap. 9, pp. 349-414.
		LAKE, "Cyberman from Logitech," at http://www.ibiblio.org/GameBytes/issue21/greviews/cyberman.html , 1994.
		"Component Maintenance Manual With Illustrated Parts List, Coaxial Control Shaker Part No. C-25502," Safe Flight Instrument Corporation, Revised 28 January 2002 (3 pages).
		"Technical Manual Overhaul Instructions With Parts Breakdown, Coaxial Control Shaker Part No. C-25502," Safe Flight Instrument Corporation, Revised 15 July 1980 (23 pages).
		SCANNELL, "Taking a Joystick Ride," <i>Computer Currents</i> , Boston Edition, Vol. 9, No. 11, November 1994
		YAMAKITA et al., "Tele-Virtual Reality of Dynamic Mechanical Model," <i>Proceedings of the 1992 IEEE/RSJ International Conference on Intelligent Robots and Systems</i> , Raleigh, NC, July 7-10, 1992
		NOLL, "Man-Machine Tactile," <i>SID Journal</i> , July/August 1972 Issue.
		ROSENBERG, "Virtual Fixtures: Perceptual Overlays Enhance Operator Performance In Telepresence Tasks," <i>Ph.D. Dissertation</i> , Stanford University, June 1994.

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(2 of 2)

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031
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Substitute for form 1449A/PTO		Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/615,927		
		Filing Date	July 10, 2003		
		First Named Inventor	Louis B. Rosenberg		
		Art Unit	2675.		
		Examiner Name	Unassigned		
Sheet	1	of	18	Attorney Docket Number	IMMR106/01US

U.S. PATENT DOCUMENTS					
Examiner	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
		2,906,179	09/1959	Bower	
		3,157,853	11/17/1964	Hirsch	
		3,220,121	11/30/1965	Cutler	
		3,490,059	01/1970	Paulsen et al.	
		3,497,668	2/24/1970	Hirsch	
		3,517,446	06/30/1970	Corlyon et al.	
		3,531,868	10/1970	Stevenson	
		3,795,150	03/1974	Eckhardt	
		3,875,488	04/1975	Crocker et al.	
		3,890,958	06/1975	Fister et al.	
		3,902,687	6/25/1973	Hightower	
		3,903,614	09/09/1975	Diamond et al.	
		3,919,691	11/11/1975	Noll	
		3,923,166	12/02/1975	Fletcher et al.	
		3,944,798	03/1976	Eaton	
		4,114,882	09/1978	Mau	
		4,125,800	11/14/1978	Jones	
		4,131,033	12/1978	Wright et al.	
		4,148,014	04/1979	Burson	
		4,160,508	07/10/1979	Salsbury	
		4,216,467	08/1980	Colston	
		4,236,325	10/02/1980	Hall et al.	
		4,398,889	08/16/1983	Lam et al.	
		4,448,083	05/1984	Hayashi	
		4,477,043	10/1984	Repperger	
		4,477,973	10/1984	Davies	
		4,513,235	04/23/1985	Acklam et al.	
		4,550,221	10/1985	Mabusth	
		4,550,617	11/1985	Fraignler et al.	
		4,560,983	12/1985	Williams	
		4,571,834	02/1986	Fraser et al.	
		4,581,491	04/08/1986	Boothroyd	
		4,593,470	06/1986	Davies	
		4,599,070	07/08/1986	Hladky et al.	

Examiner
SignatureDate
Considered

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		Filing Date	July 10, 2003
		First Named Inventor	Louis B. Rosenberg
		Art Unit	2675
		Examiner Name	Unassigned
Sheet 2 of 18	Attorney Docket Number	IMMR106/01US	

U.S. PATENT DOCUMENTS					
Examiner	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
		4,601,206	07/1986	Watson	
		4,603,284	07/29/1986	Perzley	
		4,604,016	08/1986	Joyce	
		4,632,341	07/1987	Repperger et al.	
		4,638,798	01/1987	Sheldon et al.	
		4,653,011	03/1987	Iwano	
		4,654,648	03/31/1987	Herrington et al.	
		4,676,002	06/1987	Slocum	
		4,679,331	12/1986	Koontz	
		4,688,983	08/1987	Lindbom	
		4,689,449	08/25/1987	Rosen	
		4,692,756	09/1987	Clark	
		4,703,443	10/1987	Moriyasu	
		4,704,909	11/1987	Grahn et al.	
		4,706,294	11/1987	Ouchida	
		4,708,656	11/24/1987	De Vries et al.	
		4,713,007	12/15/1987	Alban	
		4,734,685	03/1988	Watanabe	
		4,750,487	06/1988	Zanetti	
		4,769,763	09/1988	Trieb et al.	
		4,782,327	11/1988	Kley et al.	
		4,787,051	11/1988	Olson	
		4,791,934	12/1988	Brunnett	
		4,795,296	01/03/1989	Jau	
		4,798,919	01/1989	Miessler et al.	
		4,800,721	01/31/1989	Cemenska et al.	
		4,803,413	02/1989	Kendig et al.	
		4,811,608	03/1989	Hilton	
		4,819,195	04/1989	Bell et al.	
		4,823,634	04/25/1989	Culver	
		4,839,838	06/13/1989	LaBiche et al.	
		4,849,692	07/1989	Blood	
		4,853,874	08/01/1989	Iwamoto et al.	
		4,868,549	09/19/1989	Affinito et al.	

Examiner Signature	Date Considered
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/615,927
		Filing Date	July 10, 2003
		First Named Inventor	Louis B. Rosenberg
		Art Unit	2675
		Examiner Name	Unassigned
Sheet 3 of 18	Attorney Docket Number	IMMR106/01US	

U.S. PATENT DOCUMENTS					
Examiner	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		4,879,556	11/1989	Duimel	
		4,888,538	12/19/1989	Dimitov et al.	
		4,888,877	12/1989	Enderle et al.	
		4,891,764	010/2/1990	McIntosh	
		4,891,889	01/1990	Tomelleri	
		4,896,554	01/1990	Culver	
		4,907,970	03/13/1990	Meenen, Jr.	
		4,907,973	03/1990	Hon	
		4,925,312	05/1990	Onaga et al.	
		4,930,770	06/05/1990	Baker	
		4,934,694	06/19/1990	McIntosh	
		4,935,728	06/19/1990	Kley	
		4,942,538	07/17/1990	Yuan et al.	
		4,942,545	07/1990	Sapia	
		4,945,305	07/1990	Blood	
		4,945,501	07/1990	Bell et al.	
		4,949,119	08/14/1990	Moncrief et al.	
		4,961,038	10/1990	MacMinn	
		4,961,138	10/1990	Gomiak	
		4,961,267	10/1990	Herzog	
		4,962,448	10/1990	DeMaio et al.	
		4,962,591	10/1990	Zeller et al.	
		4,982,504	01/1991	Soderberg et al.	
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		4,983,786	01/1991	Stevens et al.	
		4,983,901	01/1991	Lehmer	
		5,007,085	04/09/1991	Greanias et al.	
		5,007,300	04/16/1991	Siva	
		5,018,922	05/28/1991	Yoshinada et al.	
		5,019,761	05/28/1991	Kraft	
		5,022,407	06/11/1991	Horch et al.	
		5,035,242	07/30/1991	Franklin	
		5,038,089	08/06/1991	Szakaly	
		5,040,306	08/1991	McMurtry et al.	
		5,044,956	09/03/1991	Behensky et al.	

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STATEMENT BY APPLICANT**

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Sheet **4** of **18****Complete if Known**

Application Number	10/615,927
Filing Date	July 10, 2003
First Named Inventor	Louis B. Rosenberg
Art Unit	2675
Examiner Name	Unassigned
Attorney Docket Number	IMMR106/01US

U.S. PATENT DOCUMENTS

Examiner	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		5,050,608	09/29/1991	Watanabe et al.	
		5,065,145	11/1991	Purcell	
		5,072,361	12/10/1991	Davis et al.	
		5,076,517	12/1991	Ferranti et al.	
		5,078,152	010/7/1992	Bond	
		5,080,377	01/14/1992	Stamper et al.	
		5,088,046	02/1992	McMurtry et al.	
		5,088,055	02/1992	Oyama	
		5,095,303	03/1992	Clark et al.	
		5,103,404	04/07/1992	McIntosh	
		5,107,080	04/21/1992	Rosen	
		5,107,262	04/1992	Cadoz et al.	
		5,116,051	05/26/1992	Moncrief et al.	
		5,116,180	05/1992	Fung et al.	
		5,126,948	06/1992	Mitchell et al.	
		5,128,671	07/07/1992	Thomas Jr.	
		5,131,844	07/1992	Marinaccio et al.	
		5,132,672	07/21/1992	Clark	
		5,139,261	08/18/1992	Openiano	
		5,142,506	08/1992	Edwards	
		5,142,931	09/01/1992	Menahem	
		5,143,505	09/01/1992	Burdea et al.	
		5,146,566	09/08/1992	Hollis, Jr. et al.	
		5,148,377	09/1992	McDonald	
		5,178,012	01/1993	Culp	
		5,181,181	01/19/1993	Glynn	
		5,182,557	01/1993	Lang	
		5,184,306	02/1993	Edrman et al.	
		5,184,319	02/02/1993	Kramer	
		5,185,561	02/09/1993	Good et al.	
		5,186,629	02/1993	Rohen	
		5,186,695	02/16/1993	Mangseth et al.	
		5,187,874	02/1993	Takahashi et al.	
		5,189,355	02/1993	Larkins et al.	

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Considered

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**INFORMATION DISCLOSURE
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Sheet **5** of **18****Complete If Known**

Application Number	10/615,927
Filing Date	July 10, 2003
First Named Inventor	Louis B. Rosenberg
Art Unit	2675
Examiner Name	Unassigned
Attorney Docket Number	IMMR106/01US

U.S. PATENT DOCUMENTS

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		5,189,806	03/1993	McMurtry et al.	
		5,193,963	03/16/1993	McAfee et al.	
		5,195,179	03/1993	Tokunaga	
		5,197,003	03/1993	Moncrief et al.	
		5,203,563	04/1993	Loper, III	
		5,204,824	04/1993	Fujimaki	
		5,209,131	05/1993	Baxter	
		5,212,473	5/18/1993	Louis	
		5,220,260	06/15/1993	Schuler	
		5,223,776	06/29/1993	Radke et al.	
		5,228,356	07/1993	Chuang	
		5,230,623	07/27/1993	Guthrie et al.	
		5,235,868	08/17/1993	Culver	
		5,235,868	08/1993	Culver	
		5,240,417	8/31/1993	Smithson et al.	
		5,243,266	09/07/1993	Kasagami et al.	
		5,251,127	10/1993	Raab	
		5,251,156	10/1993	Heier et al.	
		5,259,120	11/1993	Chapman et al.	
		5,259,894	11/1993	Sampson	
		5,262,777	11/1993	Low et al.	
		5,264,768	11/23/1993	Gregory et al.	
		5,266,875	11/30/1993	Slotine et al.	
		5,271,290	12/21/1993	Fischer	
		5,275,174	01/04/1994	Cook	
		5,275,565	01/04/1994	Moncrief	
		5,286,203	02/1994	Fuller, et al.	
		5,289,273	02/22/1994	Lang	
		5,296,846	03/1994	Ledley	
		5,296,871	03/1994	Paley	
		5,298,890	03/1994	Kanamaru et al.	
		5,299,810	04/05/1994	Pierce	
		5,309,140	05/03/1994	Everett	
		5,313,230	05/1994	Venolia et al.	

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Sheet **6** of **18****Complete if Known**

Application Number	10/615,927
Filing Date	July 10, 2003
First Named Inventor	Louis B. Rosenberg
Art Unit	2675
Examiner Name	Unassigned
Attorney Docket Number	IMMR106/01US

U.S. PATENT DOCUMENTS

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		Number Kind Code ² (if known)			
		5,334,027	08/02/1994	Wherlock	
		5,341,459	08/23/1994	Backes	
		5,351,692	10/1994	Dow et al.	
		5,354,162	10/11/1994	Burdea et al.	
		5,355,148	10/1994	Anderson	
		5,374,942	12/1994	Gilligan et al.	
		5,379,663	01/1995	Hara	
		5,381,080	01/1995	Schnell et al.	
		5,384,460	01/1995	Tseng	
		5,386,507	01/1995	Teig et al.	
		5,389,865	02/14/1995	Jacobus et al.	
		5,396,266	03/07/1995	Brimhall	
		5,396,267	03/07/1995	Bouton	
		5,397,323	03/1995	Taylor et al.	
		5,402,582	04/1995	Raab	
		5,405,152	04/11/1995	Katanics et al.	
		5,412,880	05/1995	Raab	
		5,414,337	05/09/1995	Schuler	
		5,417,696	05/1995	Kashuba et al.	
		5,428,748	06/27/1995	Davidson et al.	
		5,429,140	07/04/1995	Burdea et al.	
		5,435,554	07/25/1995	Lipson	
		5,436,542	07/25/1995	Petellin et al.	
		5,436,638	07/25/1995	Bolas et al.	
		5,436,640	07/1995	Reeves	
		5,445,166	08/1995	Taylor	
		5,451,924	09/19/1995	Massimino et al.	
		5,459,382	10/17/1995	Jacobus et al.	
		5,466,213	11/14/1995	Hogan	
		5,467,763	11/1995	McMahon et al.	
		5,471,571	11/1995	Smith et al.	
		5,482,051	01/1996	Reddy et al.	
		5,512,919	04/30/1996	Araki	
		5,513,100	04/30/1996	Parker et al.	

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Sheet **7** of **18****Complete If Known**

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First Named Inventor	Louis B. Rosenberg
Art Unit	2675
Examiner Name	Unassigned
Attorney Docket Number	IMMR106/01US

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		Number Kind Code ² (if known)			
		5,526,480	06/1996	Gibson	
		5,530,455	06/1996	Gillick et al.	
		5,547,382	08/20/1996	Yamasaki	
		5,550,562	08/27/1996	Aoki et al.	
		5,551,701	09/03/1996	Bouton et al.	
		5,565,840	10/1996	Thomer et al.	
		5,565,887	10/1996	McCambridge et al.	
		5,565,888	10/1996	Selker	
		5,570,111	10/1996	Barrett et al.	
		5,576,727	11/19/1996	Rosenberg et al.	
		5,577,981	11/26/1996	Jarvik	
		5,583,407	12/1996	Yamaguchi	
		5,583,478	12/1996	Renzi	
		5,586,257	12/17/1996	Perfman	
		5,587,937	12/24/1996	Massie et al.	
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8

of

18

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Application Number

10/615,927

Filing Date

July 10, 2003

First Named Inventor

Louis B. Rosenberg

Art Unit

2675

Examiner Name

Unassigned

Attorney Docket Number

IMMR106/01US

U.S. PATENT DOCUMENTS

Examiner	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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STATEMENT BY APPLICANT**

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Sheet **9** of **18****Complete if Known**

Application Number	10/615,927
Filing Date	July 10, 2003
First Named Inventor	Louis B. Rosenberg
Art Unit	2675
Examiner Name	Unassigned
Attorney Docket Number	IMMR106/01US

U.S. PATENT DOCUMENTS

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		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			
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Sheet **10** of **18**

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Application Number	10/615,927
Filing Date	July 10, 2003
First Named Inventor	Louis B. Rosenberg
Art Unit	2675
Examiner Name	Unassigned
Attorney Docket Number	IMMR106/01US

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		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			
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Sheet **11** of **18****Complete if Known**Application Number **10/615,927**Filing Date **July 10, 2003**First Named Inventor **Louis B. Rosenberg**Art Unit **2675**Examiner Name **Unassigned**Attorney Docket Number **IMMR106/01US****OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
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Sheet **12** of **18****Complete if Known**Application Number **10/615,927**Filing Date **July 10, 2003**First Named Inventor **Louis B. Rosenberg**Art Unit **2675**Examiner Name **Unassigned**Attorney Docket Number **IMMR106/01US****OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
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Sheet 13

of 18

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Application Number 10/615,927

Filing Date July 10, 2003

First Named Inventor Louis B. Rosenberg

Art Unit 2675

Examiner Name Unassigned

Attorney Docket Number IMMR106/01US

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Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
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Sheet **14** of **18****Complete If Known**

Application Number	10/615,927
Filing Date	July 10, 2003
First Named Inventor	Louis B. Rosenberg
Art Unit	2675
Examiner Name	Unassigned
Attorney Docket Number	IMMR106/01US

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Sheet 15 of 18

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Application Number	10/615,927
Filing Date	July 10, 2003
First Named Inventor	Louis B. Rosenberg
Art Unit	2675
Examiner Name	Unassigned
Attorney Docket Number	IMMR106/01US

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
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